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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,775	01/18/2001	Taisuke Sagara	088941/0178	5956

22428 7590 11/18/2003

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EXAMINER

TRAN, TRANG U

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 11/18/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,775

Applicant(s)

SAGARA, TAISUKE

Examiner

Trang U. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Sept. 09, 2003 have been fully considered but they are not persuasive.

In re pages 9-10, applicant argues, with respect to claim 1, that Aratani neither discloses or suggests the image decoding apparatus including the above-quoted features with the same image data being converted into at least two different image formats as required by claim 1 because each input portion of Aratani is only connected to a single display format conversion portion (see Aratani Fig 1, reference numbers 3-1, 3-2, 3-3, 3-4, 2-1, 2-2, 2-3, 2-4). Thus, in Aratani, the image data from each image source connected to an input portion can only be converted to a single image format (see Aratani Figure 1, reference numbers 1-1, 1-2, 1-3, 1-4). In contrast, the present claim allows for the same image data to be converted to two or more image formats.

In response, the examiner respectfully disagrees. First at all, claim 1 recites "**said image data** into predetermined image formats". It is noted that "said image data" is not limited to only one single image but it can be more than one image (two or more images). Thus, the claimed "said image data into predetermined image formats" can be interpreted as plurality of images being converted into plurality of predetermined image formats. As recognized by applicant, Aratani does disclose plurality of images (see col. 4, lines 8-15) being converted to plurality of predetermined formats (from col. 8, line 60 to col. 9, line 3).

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Additionally, even if claim 1 recites the **same image data** being converted into at **least two different image formats**, Aratani does also disclose such feature. Aratani discloses in from col. 8, line 60 to col. 9, line 3 that "As shown in FIG. 2, consider the case while a first image (1-1) input from the image source 1-1 is displayed on the full screen of the display device, a second image (1-2) is input from the image source 1-2. In this case, there may be five or more display results of the images (1-1) and (1-2), including the display results of (a), (b), (c), (d) and (e). Each display example can be realized by changing the display scaling at the display format conversion portions 3-1 and 3-2 and by changing the hierarchical level of the frame memory 9 having a priority order to the hierarchical level at which image data is stored". From the above passage, it is recognized that the **same image data** (1-1) or (1-2) can be converted into **five different predetermined formats as shown in (a), (b), (c), (d) and (e) in Fig. 2**. Thus, Aratani does indeed disclose the claimed alleged the same image data being converted into at least two different image formats.

In re pages 10-11, applicant argues, with respect to claim 2, that Aratani neither discloses nor suggests the image decoding apparatus including the above-quoted features with format conversion devices that can convert any of a first to N-th image data into predetermined image formats because, in Aratani, each image source (Aratani Figure 1, reference numbers 1-1, 1-2, 1-3, 1-4) is only connected to a single display format conversion portion (reference numbers 3-1, 3-2, 3-3, 3-4) through a single input portion (reference numbers 2-1, 2-2, 2-3, 2-4).

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In response, the examiner respectfully disagrees. As discussed above with respect to claim 1, Aratani discloses from col. 8, line 60 to col. 9, line 3 that the display format conversion portions 3-1 and 3-2 can convert any of a first to N-th image data (1-1) or (1-2) into predetermined image formats as **shown in (a), (b), (c), (d) and (e) in Fig. 2**. Thus, Aratani does disclose the claimed format conversion devices (3-1) and (3-2) that can convert any of a first to N-th image data into predetermined image formats.

In re page 11, applicant argues, with respect to claim 3, that Aratani neither discloses nor suggests the image decoding apparatus including the above-quoted features with any of first to N-th image data being distributed to any of first to N-th format conversion devices in response to requests made by the format conversion devices.

In response, the examiner respectfully disagrees. As discussed above with respect to claim 1, Aratani discloses from col. 8, line 60 to col. 9, line 3 that any of first to N-th image data (1-1) or (1-2) can be distributed to any of first to N-th format conversion devices (3-1) or (3-2) in response to requests according to the display formats as shown in **(a), (b), (c), (d) and (e) in Fig. 2**.

In re pages 11- 12, applicant argues, with respect to claim 4, that Aratani does not disclose the claimed "wherein at least one of said first to N-th image coded data is input through a PCI (Peripheral Component Interconnect) bus" because, for input, Aratani teaches that each image source communicates to an input portion via a bi-directional serial communications line and not via a bus (see Aratani column 13, lines 44-47).

In response, as recognized by applicant, each image source of Aratani communicates to an input portion via a bi-directional serial communications line. The claimed "PCI" bus is anticipated by Aratani's bi-directional serial communications line because the bi-directional serial communications line of Aratani is bus that connected the peripheral device (image sources) to Aratani's system.

In re pages 12-14, applicant argues, with respect to claim 5, that the synchronization converter in Han is used to adjust a synchronizing signal such that the interval of the synchronizing signal corresponds to the actual data interval of received data (see Han column 3, lines 16-20; column 4, lines 28-58) while, the synchronization adjusting devices of the present claim are used to generate synchronizing signals to be in synchronization with a first synchronization signal and it would not have been obvious to incorporate the synchronization converter as taught by Han into the system of Aratani because synchronization of output signals would not help the system in Aratani.

In response, the examiner respectfully disagrees. Han discloses in col. 4, lines 28-43 that "To convert the sync signals, ... the first comparator 47 counts the VGA video sync signal from the counter 42 and outputs the sync signal to the sync signal generator 49 such that the rising of the sync signal corresponds to the beginning to the effective data. Also, the second comparator 48 counts the VGA video sync signal from the counter 42 and outputs the sync signal to the sync signal generator 49 such that the falling ... VGA and NTSC video can be processed by the same hardware". From the above passage, it is clear to one of ordinary skill in the art that the sync converter 40 of Han generates synchronization signals to be in synchronization with a first

synchronization signal (the synchronization signals counted by counter 42 or the synchronization signals inputted to the counter 42). Thus, Han does indeed disclose the claimed synchronization adjusting devices.

Han also teaches an advantage of his system in col. 1, lines 49-52 that "Another object of the present invention is to **minimize the necessary hardware** for a digital TV receiver which can simultaneously process and display input videos with different formats". Therefor, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Aratani and Han as proposed by the examiner to minimize the necessary hardware for the TV receiver which can simultaneously process and display input videos with different formats as taught by Han.

In re page 14, applicant states that independent claim 9 is believed to be allowable for at least the same reasons claims 1 and 5 are believed to be allowable, independent claim 10 is believed to be allowable for at least the same reasons claims 2 and 3 are believed to be allowable, independent claim 12 is believed to be allowable for at least the same reasons claims 1 and 5 are believed to be allowable, independent claim 13 is believed to be allowable for at least the same reasons claims 2 and 3 are believed to be allowable, and all dependent claims are believed to be allowable for at least the same reasons as the independent claims from which they depend and based on the additional features that are recited in the claimed themselves.

In response, as discussed above with respect to claims 1-3 and 5, Aratani and Han disclose all the claimed limitations.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Aratani et al (US Patent No. 6,538,675 B2).

In considering claim 1, Aratani et al discloses all the claimed subject matter, note 1) the claimed first to N-th (N is an integer more than 2) image format conversion devices for generating and outputting first to N-th images after converting said image data into predetermined image formats is met by the display format conversion portions 3-1, 3-2, 3-3 and 3-4 (Fig. 1, col. 4, lines 42-55).

In considering claim 2, Aratani et al discloses all the claimed subject matter, note 1) the claimed first to N-th decoding devices which convert input first to N-th image coded data for generating and outputting first to N-th image data by decoding said first to N-th image coded data is met by the input portions 2-1, 2-2, 2-3 and 2-4 (Fig. 1, col. 4, lines 8-41), and 2) the claimed first to N-th image format conversion devices for generating and outputting first to N-th image data by converting any of said image data from among said first to N-th image data into respective predetermined image formats is

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met by the display format conversion portions 3-1, 3-2, 3-3 and 3-4 (Fig. 1, col. 4, lines 42-55).

In considering claim 3, the claimed wherein the image decoding apparatus comprises a distribution control apparatus for distributing any of the image data among first to N-th image data respectively to first to N-th image format conversion devices, in response to a request of said first to N-th image format conversion device is met by the control portion 6 (Fig. 1, col. 4, line 56 to col. 5, lines 19).

In considering claim 4, the claimed wherein at least one of said first to N-th image coded data is input through a PCI (Peripheral Component Interconnect) bus is met by the bus interface 4 (Fig. 1, col. 4, lines 42-55).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aratani et al (US Patent No. 6,538,675 B2).

In considering claim 7, Aratani et al disclose all the limitations of the instant invention as discussed in claim 1 above, except for providing the claimed wherein at least one of said image format conversion devices among said first to N-th image format conversion devices generates an image converted into a format composed of 1920 pixels in the horizontal direction and 1080 lines in the vertical direction, and at least one

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of said image format conversion devices generates an image converted into a format composed of 720 pixels in the horizontal direction and 480 lines in the vertical direction. The capability of using format conversion from 1920x1080 to 720x480 is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known format conversion from 1920x1080 to 720x480 into Aratani et al's system in order to convert the input image to suitable display format so that the video signal can be displayed on televisions having different aspect ratios.

In considering claim 8, Aratani et al disclose all the limitations of the instant invention as discussed in claim 2 above, except for providing the claimed wherein at least one of said decoding device and said first to N-th image format conversion devices are formed on the same semiconductor integrated circuit substrate. The capability of using decoding device and the first to N-th image format conversion devices are formed on the same semiconductor integrated circuit substrate is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known decoding device and the first to N-th image format conversion devices are formed on the same semiconductor integrated circuit substrate into Aratani et al's system in order to reduce the size of the system.

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aratani et al (US Patent No. 6,538,675 B2) in view of Han (US Patent No. 6,175,387 B1).

In considering claim 5, Aratani et al discloses all the claimed subject matter, note 1) the claimed wherein the image decoding apparatus comprises: an image synchronizing signal generation device for generating and outputting a first vertical image synchronizing signal used for outputting said image by any one of the image format conversion devices among said first to N-th image format conversion devices is met by the input portions 2-1, 2-2, 2-3 and 2-4 (Fig. 1, col. 4, lines 8-41). However, Aratani et al explicitly does not disclose the claimed first to M-th (M: an integer equal to N-1) image synchronizing signal generating and synchronization adjusting devices for generating and outputting the second to the N-th vertical image synchronizing signals respectively in synchronization with said first vertical image synchronizing signal by said image format conversion devices other than said one of the image format conversion device. Han teaches that to interface the first video signal and the second video signal using the same port, a synchronization converter adjusts a difference between the sync signal of the second video signal to coincide with the sync signal of the first video signal and to correspond to the effective data (Fig. 4, col. 2, line 45 to col. 3, line 44). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the a synchronization converter as taught by Han into Aratani et al's system in order to increase the flexibility of the system by providing the video system with video signals having different video formats.

In considering claim 6, the claimed wherein said first to M-th image synchronizing signal generating and synchronization adjusting devices comprise: a counter for generating any one of said second to N-th vertical image synchronizing signals

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generated and output respectively by said first to M-th image synchronizing signal generating and synchronization adjusting devices and a counter control device for controlling the operation of said counter based on said first vertical image synchronizing signal is met by the sync converter 40 which includes a counter 42 counting synchronously with an external signal clock (Fig. 6, col. 3, line 59 to col. 4, line 44) of Han.

7. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted applicant's prior art (Fig. 6) in view of Aratani et al (US Patent No. 6,538,675 B2) and further in view of Han (US Patent No. 6,175,387 B1).

In considering claim 9, the admitted applicant's prior art (Fig. 6) discloses all the claimed subject matter, note 1) the claimed a decoding device for generating an image data by decoding input image coded data, and for storing the thus generated image data in an externally installed memory device is met by the MPEG decoding portion 1 and the external memory portion 12 (Fig. 6, page 2, lines 1-9), 2) the claimed a decoded data reading device for reading said image data stored in said memory device in response to an inputting decoded data request signal and for outputting as the decoded data is met by the decoded data reading portion 2 (page 2, lines 9-12), 3) the claimed an image synchronizing signal generation device for generating and outputting a first horizontal image synchronizing signal and a first vertical image synchronizing signal is met by the image synchronization signal generating portion 4 (page 2, lines 14-19), and 4) the claimed a first image format conversion device for generating a first image by converting said input decoded data signal into a predetermined image format, and for

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outputting said first image after synchronizing with said first horizontal image synchronizing signal and said first vertical image synchronizing signal is met by the image format converting portion 3 (page 2, lines 12-25).

However, the admitted applicant's prior art explicitly does not disclose: 1) the claimed an image synchronizing signal generating and synchronization adjusting device for generating and outputting a second horizontal image synchronizing signal and a second vertical image synchronizing signal, which is synchronized with said first vertical image synchronizing signal, and 2) the claimed a second image format conversion device for generating a second image by converting said inputting decoded data signal into a predetermined image format, and for outputting said second image after synchronizing with said second horizontal image synchronizing signal and said second vertical image synchronizing signal.

1) Han teaches that to interface the first video signal and the second video signal using the same port, a synchronization converter adjusts a difference between the sync signal of the second video signal to coincide with the sync signal of the first video signal and to correspond to the effective data (Fig. 4, col. 2, line 45 to col. 3, line 44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the a synchronization converter as taught by Han into the admitted applicant's prior art's system in order to increase the flexibility of the system by providing the video system with video signals having different video formats.

2) Aratani et al teach that reference numerals 3-1, 3-2, 3-2 and 3-4 represent a display format conversion portion (hereinafter called a "display format conversion

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portion3") for converting a display format (the numbers of display lines, dots and colors) of image data received at the input portion 2, under control of a control portion 6 (Fig. 1, col. 4, lines 42-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the display format conversion as taught by Aratani et al into the admitted applicant's prior art's system in order to increase the flexibility of the system by providing the video system with video signals having different video formats.

In considering claim 10, the admitted applicant's prior art (Fig. 6) discloses all the claimed subject matter, note 1) the claimed a first decoding device for generating a first image data by decoding input first image coded data and for storing the generated first image data in an externally installed memory device is met by the MPEG decoding portion 1 and the external memory portion 12 (Fig. 6, page 2, lines 1-9), 2) the claimed a decoded data reading device for reading said first or second image data stored in said memory device in response to an inputting first decoded data request signal and for reading said first or second image data stored in said memory device in response to an inputting second decoded data request signal and for outputting multiplexed decoded data prepared by multiplexing said first or second image data is met by the decoded data reading portion 2 (page 2, lines 9-12), 3) the claimed an image synchronizing signal generation device for generating a first horizontal image synchronizing signal and a first vertical image synchronizing signal is met by the image synchronization signal generating portion 4 (page 2, lines 14-19), and 4) the claimed a first image format conversion device, which outputs a first decoded data request signal for generating a

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first image by converting said input decoded data signal into a predetermined image format and for outputting said first image after synchronizing with said first horizontal image synchronizing signal and said first vertical image synchronizing signal is met by the image format converting portion 3 (page 2, lines 12-25).

However, the admitted applicant's prior art explicitly does not disclose: 1) the claimed an image synchronizing signal generating and synchronization adjusting device for generating and outputting a second horizontal image synchronizing signal and a second vertical image synchronizing signal, 2) the claimed a second decoding device for generating a second image data by decoding an input second image coded data, and for storing the generated second image data in an externally-installed memory device, 3) the claimed a distribution control device for distributing said multiplexed decoded signal to a first decoded data signal corresponding to said first decoded data request signal and a second decoded data signal corresponding to said second decoded data request signal, and 4) the claimed a second image format conversion device which outputs a second decoded data signal for generating a second image by converting said inputting decoded data signal into a predetermined image format, and for outputting said second image after synchronizing with said second horizontal image synchronizing signal and said second vertical image synchronizing signal.

1) Han teaches that to interface the first video signal and the second video signal using the same port, a synchronization converter adjusts a difference between the sync signal of the second video signal to coincide with the sync signal of the first video signal and to correspond to the effective data (Fig. 4, col. 2, line 45 to col. 3, line 44).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the a synchronization converter as taught by Han into Aratani et al's system in order to increase the flexibility of the system by providing the video system with video signals having different video formats.

Aratani et al teach that:

2) Television signals received by an antenna 209 are detected and frequency-modulated by television tuners 205 to 208, each encoder 201 to 204 decodes television signals having a standard signal format such as NTSC, PAL and SECAM into composite video signals and sound signals (Fig. 5, col. 12, lines 17-46).

3) Reference numeral 5 represents a bus controller for receiving image data output from each bus interface portion 4 and image data output from a frame memory controller 7 and a superposition data controller 8 and for arbitrating transfer of the image data in accordance with a priority order upon reception of a transfer request from these controllers (Fig. 1, col. 4, lines 49-55).

4) Reference numerals 3-1, 3-2, 3-2 and 3-4 represent a display format conversion portion (hereinafter called a "display format conversion portion3") for converting a display format (the numbers of display lines, dots and colors) of image data received at the input portion 2, under control of a control portion 6 (Fig. 1, col. 4, lines 42-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the second decoder, the controlling distribution of the first and second images and the display format conversion as taught by Aratani et al

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into the admitted applicant's prior art's system in order to increase the flexibility of the system by providing the video system with video signals having different video formats.

In considering claim 11, the combination of the admitted applicant's prior art, Aratani et al and Han disclose all the limitations of the instant invention as discussed in claim 2 above, except for providing the claimed wherein at least said decoding device, said image synchronizing signal generating device, said image synchronizing signal generating and synchronization adjusting device, said image format conversion device, and said second image format conversion device are formed on a semiconductor integrated circuit substrate. The capability of using decoding device, image synchronizing signal generating device, image synchronizing signal generating and synchronization adjusting device, image format conversion device, and second image format conversion device are formed on the same semiconductor integrated circuit substrate is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known decoding device, image synchronizing signal generating device, image synchronizing signal generating and synchronization adjusting device, image format conversion device, and second image format conversion device are formed on the same semiconductor integrated circuit substrate into the combination of the admitted applicant's prior art, Aratani et al and Han's system in order to reduce the size of the system.

Claim 12 is rejected for the same reason as discussed in claim 9.

Claim 13 is rejected for the same reason as discussed in claim 10.

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Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-0090**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller**, can be reached at **(703) 305-4795**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

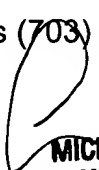
(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TT TT
November 16, 2003


MICHAEL H. LEE
PRIMARY EXAMINER